CITY OF FAIRFIELD

RESOLUTION NO. 2016 - ____

A RESOLUTION APPROVING THE CITY OF FAIRFIELD INFORMATION TECHNOLOGY POLICY

WHEREAS, City staff rely on voice, data, video, and radio technology to perform required work; and

WHEREAS, the City's Information Technology Policy provides broad guidance to staff using, implementing, and planning voice, data, video, and radio technology; and

WHEREAS, the Chief Information Officer has developed technology plans for implementation, maintenance, and upgrades of such systems; and

WHEREAS, the technology working plan identifies projects to be funded and installed over a five to ten year period.

NOW, THEREFORE, THE COUNCIL OF THE CITY OF FAIRFIELD HEREBY RESOLVES:

Section 1. The Fairfield City Council hereby authorizes and directs the City Manager to implement the attached Information Technology Policy and Work Plan, which is hereby adopted and incorporated by reference.

Section 2. The City Manager is hereby authorized to implement the provisions of said Information Technology Policy.

PASSED AND ADOPTED this 21st day of June, 2016, by the following vote:

AYES:	COUNCILMEMBERS:
NOES:	COUNCILMEMBERS:
ABSTAIN:	COUNCILMEMBERS:
ABSENT:	COUNCILMEMBERS:
	Marian
	Mayor
ATTEST:	
City Clerk	



Information Technology (IT) Policy

Introduction

The purpose of this policy is to provide broad guidelines to staff responsible for the City's technology resources. Strategic technology planning, project implementation, infrastructure design and replacement, software licensing, and system maintenance activities are governed by this policy.

The Chief Information Officer (CIO), under the supervision and direction of the Director of Finance and Technology and the City Manager, is responsible for maintaining the City's Information Technology (IT) infrastructure and assets. In furtherance of this responsibility, the CIO shall issue and administer detailed technology plans coordinated with the Management Leadership Team (MLT), a body that includes the City Manager and all City department heads.

Policy Guidelines

1) Objectives

The primary objectives of the City's long-range technology strategy are:

- A. <u>Effective Use of Technology</u>. The City shall implement only technology that supports achievement of Council-established goals, improves organizational efficiency, reduces operating costs, and/or results in improved service.
- B. Technology Investment and Risk Management. Technology investments shall be consistent with City Council-adopted budget principles. Proposed and ongoing technology projects shall be reviewed based on potential benefits, anticipated costs, and associated risks. Projects with significant costs and/or risks shall be addressed with the Management Leadership Team before approval is sought by the City Council. Significant risks, and any steps taken to mitigate those risks, shall be documented throughout the project lifecycle. Projects with both a high cost and significant risk factors may require additional project management and/or oversight to assist the CIO and to ensure successful completion. Projects may be deleted from the IT Plan prior to completion if they fail to meet investment criteria due to risk, cost, unmet goals, or other similar factors.
- C. <u>Service Continuity and Security</u>. Steps shall be taken to minimize unexpected service disruption ("downtime") and security breaches. Safeguards shall include a standards-based enterprise architecture, security measures and audits, use of regularly updated anti-virus software on PCs and servers, firewalls, anti-spyware and anti-spam products, hardware and software maintenance contracts covering key system components, and a comprehensive backup and recovery program, which shall be tested periodically and following major changes in system configuration.
- D. Maintain Technical Infrastructure. The long range technology plan shall establish replacement cycles for the City's computer, telephone and radio assets to ensure that equipment is kept up-to-date and that adequate funding exists as upgrades are required. Application software shall be upgraded as often as necessary to comply with the goals established in this Policy. For desktop computers, the replacement cycle is 4 years. The replacement cycle for workstations, storage arrays and servers shall be 5 7 years, except blade servers which are 8 10 years. The telephone and voicemail system replacement cycle shall be 10 to 12 years. The replacement cycle for CCTV cameras is 6 8 years. To reduce costs, project risk, and implementation time, hardware and software that have performed well shall be replaced with upgraded versions from the same vendor.



Information Technology (IT) Policy

2) Special Considerations

- A. New Technologies. Recognizing that new technologies may be unstable, and are sometimes unsuccessful, projects shall be implemented using proven techniques, except where the potential benefits of using a new product or strategy outweigh the risks. Information Technology (IT) staff determining the acceptability for use of a particular product or technology shall act with care, skill, prudence and diligence to protect City resources. Whenever possible, new technology first shall be implemented on a "pilot" or "beta" test basis.
- B. <u>"Open Source" Systems.</u> To reduce the long-term costs associated with software licensing, IT staff shall evaluate open source-based applications versus proprietary systems where appropriate. Among the factors IT staff shall consider are: stability and error-free operation; total cost of operation, including training and ongoing costs; and ability to meet functional requirements.
- C. <u>Integrated Systems</u>. To make the best use of computing resources, the City should avoid "standalone" systems. The long-range technology plan shall establish a standards-based architecture for the City's technology infrastructure. IT staff evaluating systems shall give preference to applications that use the designated technologies to connect with other systems already in use. All applications selected shall either share data directly with related programs or provide interfaces to allow resource sharing with other systems.
- D. <u>In-House Development</u>. IT staff shall develop with in-house resources only those applications that may not be cost-effectively purchased from an outside vendor. Departments shall submit a Programming Services Request for each new or modified application requested. All software developed by City staff or contract employees for the City's purposes, and/or software developed using City resources, is the property of the City of Fairfield, and shall be protected in accordance with applicable copyright provisions. In accordance with Resolution 83-125, the CIO may, from time to time, sell computer software designed by City staff to outside users to recover development costs.

3) Technology Plans

- A. <u>Ten-Year Forecast</u>. As part of the City's budget process, the CIO shall submit a budget for the City's computer, radio, public access Internet, telephone and closed circuit television internal service funds, including estimates of any long term financing or inter-fund transfers required. This budget shall include planned revenue and expenditures by type of project, over a ten-year time frame, to ensure that adequate funding and other resources shall be available.
- B. Long-Range Plans. The CIO shall prepare and update annually an informal long-range technology plan detailing major computer, radio, Internet, telephone and CCTV (closed circuit television) projects. This plan shall include all upgrades and enhancements to the City's shared computer, radio, Internet, telephone and CCTV systems planned for the current equipment replacement cycle, and major system implementations scheduled for the plan period. From time to time, the CIO shall prepare or update a strategic technology plan in coordination with the Management Leadership Team, describing the nature and impact of one or more major projects included in the ten-year technology fund budgets.

IT staff and department representatives may submit new project proposals for inclusion in the longrange plan as appropriate. Projects shall be evaluated and prioritized based on anticipated benefits, cost, resource requirements, risk, and other investment factors. The Management Leadership Team shall act as the Steering Committee for the long-range IT Plan.



Information Technology (IT) Policy

- C. <u>E-Government Applications.</u> The CIO, working with representatives from each department, shall evaluate website enhancements, electronic government ("e-government") and mobile government ("m-government") applications. The review shall be based on feasibility and cost effectiveness, determined by factors including: project goals; funding sources; costs; time to implement; and risks, including resource constraints. Anticipated benefits, including citizen time savings, and/or staff efficiency improvements, shall also be addressed. The CIO shall update the long-range plan as necessary to include approved e-government and m-government projects.
- D. Geographic Information Systems (GIS). GIS provides a central repository to store, manipulate and view data with a geographic relationship, for example streets, sewer infrastructure, and assessor parcel addresses, increasing efficiency and reducing duplicate efforts. IT shall develop and maintain GIS architecture standards and manage the central GIS functions. To ensure the most effective use of this powerful resource, a citywide team shall guide the project. The CIO and Assistant Director of Public Works shall serve as GIS project sponsors. Each department shall appoint one or more representatives to the GIS Team.

GIS Team representatives shall identify proposed projects to be included in the GIS section of the long-range IT Plan. The GIS Team shall make recommendations based upon anticipated benefits, cost, risk, time to complete, impact on other approved projects, and available resources. The project sponsors shall review the project recommendations, and refer any conflicting options to the steering committee for approval. The CIO shall add the GIS projects to the IT Plan and provide management oversight for the program. GIS projects shall be staffed by a combination of IT and departmental staff, with assistance provided by GIS contract programmers as required for approved projects.

4) Technology Purchases and Funding

- A. <u>Technology Purchases</u>. Technology purchases shall be subject to the guidelines and limitations of the City's Purchasing Policy. All desktop, laptop and mobile data computers are replaced on a four year cycle set by the CIO funded by the IT Internal Service Fund. All radio and telephone purchases shall be reviewed and approved by the CIO, with the exception of transportation and water treatment plant control systems, which due to their specialized nature shall be approved by the Director of Public Works. Departments may purchase approved personal devices, small printers, tablets, etc. directly, in accordance with the City's Purchasing Policy.
- B. <u>Software Licensing and Asset Management</u>. The City uses a variety of computer software to help fulfill its mission; this software is protected by copyright laws and licensing agreements. The City shall acquire, reproduce, transmit and use software in compliance with all applicable copyright laws and manufacturer's terms, and maintain only properly licensed software on its computers and networks. The CIO shall review all software agreements and computer contracts for compliance with the City's software licenses and computer policies.

To ensure that the City receives the full benefits of its software, and to identify volume-purchasing opportunities, the CIO shall implement a comprehensive software management program. The program shall include systems and controls to ensure that only properly licensed software is installed on, or accessed by, City computers. Prior to installation, all software to be used on City computers shall be approved by the CIO to verify compliance with the software management program and all copyright and other restrictions that may be set by the manufacturer. The CIO shall conduct periodic inventories to ensure license agreements are up to date.



Information Technology (IT) Policy

- C. <u>E-Procurement</u>. To reduce costs and workload associated with the procurement process, City staff may utilize Internet-based procurement options ("e-procurement") when available and cost-effective. Where feasible, the CIO shall utilize Internet-based purchasing techniques to request competitive bids and quotations for large technology projects.
- D. <u>Sole Source Procurement</u>. As often as possible, to minimize risks, including impact on end-users, existing systems that are operating satisfactorily shall be upgraded by purchasing and installing the latest available version from the same vendor/manufacturer. IT staff shall monitor competing systems to ensure that the City's systems remain up-to-date. New system requests shall be researched, and, where only one vendor provides a solution that meets the City's needs, the CIO shall request the City Council's permission to suspend competitive bidding and purchase from a sole source.
- E. <u>Volume Purchasing.</u> Many government agencies conduct competitive bid processes for the same technologies the City seeks to implement, and allow other agencies to use their contracts. To reduce costs and workload associated with competitive bid and request for proposal processes, the CIO shall purchase items using California Master Award Schedule (CMAS) or National Association of State Procurement Officials (NASPO) pricing, state contracts, volume licensing agreements, and other competitively bid contracts, such as city and county contracts, when cost effective.
- F. <u>Internal Reserve Funds</u>. Technology resources such as the City web site, GIS system, radio network, telephone system, computer hardware and software, core City service applications, such as the ERP system, CLASS registration, etc. and the Municipal CCTV infrastructure, shall be purchased, maintained, and upgraded using funds accumulated in the City's public access Internet, technology, radio, CCTV and telephone reserves. Departments shall contribute to these internal service funds based on the number of computers, radios, cameras and telephones owned. Purchase of additional computers, radios, cameras and telephones shall be the responsibility of the end-user department.
- G. <u>Departmentally-Funded Systems</u>. Purchase of systems, software or other technology assets used only by one department and not coordinated with the Technology Council shall be charged to that department's budget, or other appropriate source. IT staff shall provide project coordination and technical assistance for system implementations and upgrades to the departments.

5) Technology Projects

A. <u>Project Teams.</u> For each new application implemented, a committee, led by an IT staff member and/or responsible end user manager, shall be assigned to develop the system requirements. A consultant may be used if specific expertise is required, subject to the provisions of the City's purchasing and contracting policies. The project committee will be staffed by end users knowledgeable about the proposed application, from one or more departments as appropriate to the system. IT staff shall be assigned to facilitate or manage the product implementation, and to act as liaison between the vendor and any affected end users. If a contractor is not being used, IT shall directly install the system.

The project team, working with the sponsoring department head(s), shall establish goals and schedules for system procurement and implementation. Projects shall be conducted following industry standard project management methodology, including ongoing performance monitoring, risk evaluation and mitigation, and post-implementation quality reviews. The CIO and appropriate department head or assistant department head shall serve as the steering committee for most projects. For projects with a significant citywide impact the CIO and a City Manager representative along with the designated project manager shall serve as the steering committee.



Information Technology (IT) Policy

B. <u>Technology Training.</u> With assistance from the Human Resources Division, IT shall assess training requirements periodically. Training for new technology and major system upgrades shall be included in project plans and charged to the project budget. IT will coordinate with the Technology Council to provide the cost of training employees in use of existing technology and for training to develop or improve skills. The Human Resources and Information Technology Divisions shall research opportunities for reduced cost group training, and notify supervisors when such training is available.

6) User Groups and Related Organizations

- A. <u>User Groups</u>. Application end-users and IT staff shall be encouraged to participate in user groups that offer the possibility of learning through shared experience. Through the user group, the City may attempt to obtain support for requested product enhancements, training, etc. Any expenses shall be the responsibility of the end user department.
- B. <u>Vendor User Councils</u>. User councils advise the City's software vendors on long-term product direction and market strategies, and may receive advance notice of system upgrades, pricing and strategy. The CIO, one of either the Information Technology Managers or Senior IT Analysts, or a departmental representative shall represent the City on each user council as needed. Any expenses shall be charged to the appropriate software maintenance budget or end user department.
- C. <u>MISAC</u>. The CIO and Director of Finance and Technology holds membership in the Municipal Information Systems Association of California, a League of California Cities affiliated association of IT professionals. Travel expenses to MISAC meetings shall be paid by the IT Internal Service Fund.
- D. <u>Regional GIS Work Groups.</u> The City GIS Team shall work closely with other agencies, including, but not limited to, the Fairfield Suisun Sewer District, other surrounding cities and counties, and the State of California, to improve the efficiency of GIS efforts. Examples of joint projects include data sharing, shared aerial photography, and coordinated training sessions.
- E. <u>Fairfield / Vacaville Joint Radio Committee.</u> The cities of Fairfield and Vacaville share the same public safety radio system. The CIO, one of the Information Technology Managers, or Information Technology Analyst Telecommunication, the Director of Finance and Technology and department representatives from Police, Fire and Public Works represent the City on issues of maintenance, upgrade or enhancements to the radio system with Vacaville staffing equal representation.



Information Technology 2016-17 Workplan

Function	Ongoing Activities	Projects	Funding Source
GIS	 Maintain system architecture, application and database server, Internet and Intranet applications Maintain geodatabase layers, streets, water, etc. Maintain Computer Aided Dispatch geodatabase Represent Fairfield at Solano County Regional GIS meetings/efforts 	 Fire Map Books Update Mobile Mapping Implement duplicate database server Add layers to online ArcGIS Upgrade ESRI application to version 10.3 Pictometry flyover project with Solano County regional GIS effort Hydrodynamics modeling NextGen 911 preparation Map ADA ramp locations Replace Engineering server 	IT Internal Service Fund, Water
Police Department	 Maintain system architecture, application and database server, Internet and Intranet applications Maintain mobile fleet Maintain dispatch support systems and services Maintain desktop, file systems and network connectivity Maintain Department of Justice network security infrastructure Maintain CCTV infrastructure 	MDC replacement Upgrade RIMS Mobile Upgrade RIMS CAD/RMS Implement CCTV backup and recovery system Lifecycle replacements for cameras, servers and storage Radio system upgrade preparation Desktop PC lifecycle replacements - Investigations	IT Internal Service Funds; Police; Dept of Justice Grants; Capital Project Funds
Fire Department	 Maintain system architecture, application and database server Maintain mobile fleet Maintain desktop, file systems and network connectivity 	 Connect and equip new fire station with City technology infrastructure Radio system upgrade preparation 	IT Internal Service Funds
Public Works	 Maintain system architecture, application and database servers Maintain desktop, file systems and network connectivity Maintain CCTV infrastructure 	 Upgrade data links between Waterman treatment plant and City Hall Radio system upgrade preparation CCTV lifecycle replacements Desktop PC lifecycle replacements 	IT Internal Service Funds; Telephone Inter Service Funds; Transit fund; MTC Grants; IT Internal Service Funds; Telephone Inter Service Funds; Transit fund; MTC Grants;
Parks and Recreation	 Maintain system architecture, application and database servers Maintain desktop, file systems and network connectivity Maintain CCTV infrastructure 	Implement BlueRec class registration system	IT Internal Service Funds, CDBG Grants
Community Development	 Maintain system architecture, application and database servers Maintain desktop, file systems and network connectivity, Maintain CCTV infrastructure 	 Add Economic Development tracking to TrakIT system CCTV camera lifecycle replacements 	IT Internal Service Funds



Information Technology 2016-17 Workplan

Function	Ongoing Activities	Projects	Funding Source
City Manager Office	 Maintain system architecture, application and database servers Maintain desktop, file systems and network connectivity Maintain Website and Intranet infrastructure 	 Evaluate City Website refresh Online form creation and routing application Implement Agenda Management system 	Public Access Internet Fund; Technology Fund; Public Education Government Fund
Public Safety Radio Network	 Maintain system architecture, dispatch console architecture Maintain mobile and portable equipment Maintain fleet database and talk group structure Represent Fairfield in regional communications meetings/events 	 Work with CSI Telecommunications to develop the RFP and implementation plan for a new radio system Implement new radio system 	Radio
Wide Area Network Infrastructure	Maintain system architecture, network connection structure, metropolitan area network maintenance	 Implement remote user access on new firewall platform Lifecycle firewall replacement Upgrade microwave link to FTC Upgrade microwave link to Police Training Center Install microwave link to Waterman treatment plant 	IT Internal Service Funds
Business Continuity and Disaster Recovery	 Maintain city technology disaster recovery plan, business continuity plan Coordinate efforts with city emergency operation center committee Test disaster recovery plan 	 Implement cloud services disaster recovery/business continuity solution. Update backup strategy Update security policy 	IT Internal Service Funds
Telephone and Voicemail System	 Maintain system architecture, building wiring and switching structure Maintain subscriber equipment Maintain voice disaster recovery response 	Implement call accounting automatic reporting	Telephone Fund
Imaging Information Technology	 Maintain system architecture, application and database servers Maintain industry standard data environment Maintain proper asset management and 	 Upgrade Laserfiche licensing for paperless form routing Computer room HVAC and ladder rack installation 	IT Internal Service Funds IT Internal Service Funds; Internet
Infrastructure	inventory • Maintain electronic recycling program	Virtual server infrastructure server replacement	Inter Service Funds
Finance and Technology Department	 Maintain system architecture, application and database servers Maintain desktop, file systems and network connectivity 	 Install SmartBoard technology in City Hall conference room Evaluate and implement budgeting software solution Evaluate upgrade/replacing to financial system 	IT Internal Service Funds
Video Services	 Maintain system architecture, application and database servers, Channel 26 & 27 Maintain Website and Intranet infrastructure 	Replace video streaming solution	Public Education and Government Fund